UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
Washington

Report F.S. 47 March 7, 1930

THE DEMAND FOR DRIED FRUIT IN GERMANY

by

Milton J. Newhouse
Specialist in Dried Fruit Marketing

CONTENTS Page

Washington, D. C.

THE DEMAND FOR DRIED FRUIT IN GERMANY

by

Milton J. Newhouse,
Specialist in Dried Fruit Marketing a/

Introduction and Summary

Germany is the largest foreign market for American dried prunes and is second only to the United Kingdom as a market for American dried fruit as a whole. The following report points out the principal factors bearing upon the German demand for dried fruit with particular reference to the trend in the per capita consumption of dried fruit, the competition of both imported and domestic fruit, and trade practices and marketing developments in the German dried fruit market.

Net imports of all dried fruit into Germany during the five years 1924-1928 averaged 203,751,000 pounds annually compared with 211,642,000 pounds during the period 1909-1913. This represents a per capita consumption of about 3.2 pounds in recent years compared with about 3.3 pounds before the war. Approximately 38 per cent of the total dried fruit imported into Germany during the period 1924-1928 came from the United States. About 58 per cent of the imported prunes came from the United States and most of the remainder from Yugoslavia. Practically all of the currants came from Greece while Turkey supplied 60 per cent of the imported raisins and the United States 21 per cent. It appears that American raisins have been supplanting Greek currants in the German market to a considerable extent during recent years. Most of the remaining dried fruit such as apples, apricots and peaches are supplied by the United States.

A study of the German income statistics reveals the fact that over three-fourths of the German population have incomes too small to permit of the purchase of any but the cheapest fruit. This group is probably able to buy dried fruit only when the price is relatively low. Price is, therefore, a very important consideration in determining not only the amount of dried fruit imported from the United States but also the competition to be encountered from dried fruit imported from other foreign countries.

Since data on domestic fruit production in Germany are practically non-existent, no estimate can be made of the trend in fresh fruit consumption in Germany. Imports of fresh fruit, which make up a large part of the German consumption, however, may give some clue to this trend. During the five years 1924-1928 net imports of fresh fruit per capita into Germany amounted to 22.8 pounds as compared with 19.6 pounds during the period 1909-1913. The principal gains in imports of fresh fruits have been in bananas and oranges.

---

a/ Based on investigations in Germany by Mr. Newhouse during 1928-29, while attached to the Division of Cooperative Marketing which has since been transferred to the Federal Farm Board; supplemented by a report from Assistant Agricultural Commissioner Dawson, Berlin, and by statistics compiled in the Foreign Service of the Bureau of Agricultural Economics.

American dried fruits need more publicity to overcome the far reaching and effective advertising now done in behalf of fresh fruit and competing dried fruit. There needs to be more personal contact between American dried fruit interests and the German market. Such contacts have already been established by countries competing with the United States for the German dried fruit trade. German importers of dried fruit appear generally to be satisfied with the Pacific Coast dried fruit contracts. Carton packages of dried fruit are not popular since the German housewife invariably wishes to see what she is purchasing. It is important, therefore, from the point of view of advertising Pacific Coast dried fruit that bulk displays be properly identified as to origin.

Position of Germany as dried fruit importer

In Germany, as in other North European countries, the demand for dried fruit developed as a result of the relative scarcity and high price of fresh fruit during the winter months. Since dried fruit can be shipped to distant markets with much less danger of deterioration and since they are the most highly concentrated form of fruit, Germany became an important consumer of these products and at the present time is surpassed only by the United Kingdom as the world's largest importer of dried fruit.

Germany produces practically no dried fruit. For that reason net imports over a period of years give a fairly accurate picture of domestic consumption. During the five years 1924-1928 the German net imports of dried fruit averaged 203,751,000 pounds annually compared with an annual average of 211,642,000 pounds during the five years 1909-1913. This was equivalent to approximately 3.18 pounds per capita since the war as compared with 3.26 pounds per capita before the war. The slight decline is due largely to reduced consumption of dried apples. While the per capita consumption of dried fruit shows very little change before and after the war that of fresh fruit seems to be increasing. Net imports of fresh fruit during the five years 1924-1928 averaged 22.8 pounds per capita as compared with 19.6 pounds per capita during the five years 1909-1913.

Raisins and currants constitute the most important item in the dried fruit imports of Germany but prunes run a close second. During 1909-1913 raisins and currants made up 35.5 per cent of the total and prunes 34.1 per cent. During 1924-1928 raisins and currants constituted 38.7 per cent of the total and prunes 34.9 per cent. Turkey, Greece and the United States supply most of the raisins and currants and the United States and Yugoslavia most of the prunes. The other dried fruits entering into the German trade in the order of their importance are figs, mostly from Turkey and Greece; apples and pears, mainly from the United States; apricots and peaches, mostly from the United States; dates, mainly from North Africa and Persia; and other dried fruit, mainly from the United States, Italy and Yugoslavia.

DRIED FRUIT: Imports into Germany, total reexports and per capita net imports

Dried fruit	Average 1909-1913	Average 1924-1928
	Pounds	Pounds
Apples and pears	27,354,000	16,673,000
Apple and pear by-products	4,291,000	2,311,000
Apricots and peaches	6,743,000	8,784,000
Prunes	73,290,000	74,436,000
Cherries, prunella, etc	2,660,000	1,856,000
Figs	18,453,000	22,653,000
Currants	36,342,000	22,319,000
Raisins	39,990,000	60,234,000
Dates	5,664,000	4,164,000
Total imports	214,787,000	213,430,000
Reexports	3,145,000	9,679,000
Net imports	211,642,000	203,751,000
	Per capita a/	Per capita a/
Net imports	3.26	3.18

Compiled in the Foreign Section, Division of Statistical and Historical Research, from "Auswartiger Handel" for the years specified.
a/ Population during 1909-1913 estimated at 65,000,000 and during 1924-1928 at 64,000,000.

Raisins and currants

Imports of raisins into Germany during the five years 1924-1928 have averaged 60,234,000 pounds annually as compared with an annual average of 39,990,000 pounds before the war. The consumption of currants on the other hand has been declining, imports in the 1924-1928 period having averaged 22,319,000 pounds annually against 36,342,000 pounds in 1909-1913. The increase in raisin consumption in recent years has been due in part to extremely low prices.

As regards raisins Turkey has always been and still is the most important source of supply. During 1909-1913 Turkey supplied 85 per cent of the raisins imported into Germany, Greece about 4 per cent and the United States less than 1 per cent of the total. During the five years 1924-1928 Turkey supplied on the average 60 per cent of the total, the United States 21 per cent and Greece 17 per cent. The great increase in the raisin imports of Germany since the war is due to the increase in imports from the United States and Greece. Average imports from Turkey during the five years 1924-1928 were about the same as during the five prewar years.

German imports of raisins from the United States have increased greatly in the past five years because the increasing export surplus of California raisins has enabled California shippers to undersell the Smyrna product in the German market. The German trade, however, still appears to favor the Smyrna sultana as to quality. Raisins from Russia have been a growing factor in supplies in the past few years. These raisins arrive in bags or boxes but the grading is very poor. After cleaning and grading, the better grades present an aroma and quality very similar to Smyrna sultana. The prices of these Russian raisins have been very low.

Greece is still practically the only country from which Germany imports currants but there has been a steady decline in imports since the war. Average imports from Greece during the five years 1924-1928 amounted to 22,284,000 pounds annually as compared with 35,412,000 pounds annually during 1909-1913. The German trade seems to be of the opinion that the natural sultana from California has been replacing the Greek currant in the bakery trade. The cheapness and neatness of pack plus effective advertising are the main factors that have contributed to the increasing demand for American raisins in Germany.

RAISINS AND CURRANTS: Imports into Germany, average 1909-1913 and 1924-1928

Fruit and country of origin	Average 1909-1913	Average 1924-1928
Raisins	Pounds	Pounds
Turkey	33,761,000	34,714,000
Greece	1,662,000	10,136,000
Spain	1,175,000	421,000
Persia	2,083,000	101,000
Italy	---	a/ 1,239,000
Russia	251,000	131,000
United States	628,000	12,685,000
All others	430,000	807,000
Total	39,990,000	60,234,000
Currants		
Greece	35,412,000	22,284,000
All others	930,000	35,000
Total	36,342,000	22,319,000
Grand total	76,332,000	82,553,000

Compiled in the Foreign Section, Division of Statistical and Historical Research, from "Auswartiger Handel" for the years specified.
a/ Represents largely imports from Turkey through the Free Port of Trieste.

Prunes

During the five years 1924-1928 prunes constituted 35 per cent of the German dried fruit imports. The United States is the most important source of supply having furnished on the average 58 per cent of the annual imports during this period. Yugoslavia is the next most important source of supply, having furnished on the average 36 per cent of the imports. Imports from the United States have been increasing rapidly while those from Yugoslavia have been declining.

There has been a tendency to ignore Yugoslav prunes on the markets of northwest Germany in recent years due to the availability of superior quality, low priced American prunes which have proved more suitable for packing than the less carefully dried Yugoslav prune. This tendency has not been so true of southern Germany, however, where special facilities have been established for packing Yugoslav bulk prunes. A tariff differential favors bulk prunes over packed prunes in the German market, and consequently a large part of the prunes are imported in bulk.

PRUNES: Imports into Germany, average 1909-1913 and 1924-1928

Country of origin	Average	
	1909-1913	1924-1928
	1,000 pounds	1,000 pounds
United States	31,625	43,421
Austria - Hungary	13,720	a/
Serbia	20,202	a/
Yugoslavia	b/	27,074
France	6,717	354
All others	1,026	3,587
Total	73,290	74,436

Compiled in the Foreign Section, Division of Statistical and Historical Research, from "Auswartiger Handel" for the years specified.
a/ Included in Yugoslavia since the war.
b/ Included in Austria - Hungary and Serbia before the war.

Evaporated apples

It is believed that the availability of fresh apples throughout most of the year has restricted the demand for dried apples in Germany. The trade, however, reports an increasing demand for apple rings for use in dried fruit mixtures and by the pastry trade. The quality of Oregon-Washington apple rings in 1928 proved very good but the slices were somewhat thick. Dried apple rings from these areas are replacing the New York State apple because of their superior quality although the sour taste of the New York apple is preferred.

Although imports of dried apples are still considerably below the pre-war average, there has been an increasing demand for this fruit recently. Lack of quality fruit has tended to restrict the demand since the War. The extra choice Oregon-Washington apple ring has made rapid progress as it is comparatively white in appearance, fitting in well in dried fruit mixtures. Its lack of tartness is the only objection. Extra choice California sliced apples are also selling well. Quarters are selling in small quantities but the lower grades (choice) are not much in demand. There is a good demand for apple chops, for apple screenings, and for cores and peelings packed in bags.

Apricots and other dried fruit

Germany offers a good market for extra choice northern California apricots as long as the price is not too high. Fancy and choice apricots are selling in smaller volume. Some factors in the trade report that prices

on apricots are so high that the medium grades are called for and it is generally felt that price is restricting demand. Apricots are a favored article for the mixed dried fruit trade. Competition in apricots comes mainly from South Africa (Cape Colony), and Russia. The trade is inclined to ignore the possibilities of Russia as an important factor due to irregularities of supplies, and the small size and sweet taste of the fruit from that area. Competition from South Africa is of some significance but the fruit in 1928-1929 was almost too sour although having good appearance. Occasionally Persia makes offers but no significant competition from that source seems likely in the near future.

Dried pears and peaches in Germany are used almost exclusively in mixtures. While the demand for this purpose is not large it is fairly steady. The consumption of peaches appears to be decreasing, according to the trade, due to the heavy peel.

Relative position of the United States in the German dried fruit trade

As indicated by the following table the total imports of dried fruit into Germany in the post-war years show but little change compared with the pre-war volume of trade. The significant feature of the situation is that the percentage of the total supplied by the United States has been increasing steadily while that supplied by foreign competing areas has been declining. During the five years 1924-1928 the United States supplied on the average 38.1 per cent of the total as compared with 31.7 per cent in 1909-1913, while foreign competing areas supplied 61.9 per cent as compared with 68.3 per cent before the war.

DRIED FRUIT: Imports into Germany from the United States and from other countries, average for 1909-1913 and 1924-1928

Fruit	Average 1909-1913			Average 1924-1928		
	United States	All others	Total	United States	All others	Total
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Apples and pears	25,152	2,202	27,354	14,545	2,128	16,673
Apple and pear by-products	4,137	154	4,291	1,912	399	2,311
Apricots and peaches	6,524	219	6,743	8,140	644	8,784
Prunes	31,625	41,665	73,290	43,421	31,015	74,436
Cherries, prunella, etc.	87	2,573	2,660	669	1,187	1,856
Figs	---	18,453	18,453	---	22,653	22,653
Currants	---	36,342	36,342	---	22,319	22,319
Raisins	628	39,362	39,990	12,685	47,549	60,234
Dates	---	5,664	5,664	---	4,164	4,164
Total	68,153	146,634	214,787	81,372	132,058	213,430

Compiled in the Foreign Section, Division of Statistical and Historical Research from "Auswartiger Handel" for years mentioned.

Factors relating to German demand for dried fruit a/

Population

According to the last pre-war census in Germany (December 1, 1910) the total population of the country numbered 64,926,000. In spite of the fact that Germany lost large provinces as a result of the war, the population of the country in its new boundaries at the beginning of 1928 was estimated at about 63,400,000 compared with 60,022,000 in 1914 in the corresponding boundaries. This increase of about 3,400,000 was due in part to the return of many German citizens from the colonies, foreign countries and separated districts and in part to the natural increase in population. At present the annual increase in Germany is estimated to be about 300,000 to 400,000 as compared with an annual increase before the war in the present boundaries of about 750,000.

The distribution of the German population by ages has changed considerably since the war. The number of people of fifteen years and less in 1928 comprised about one-fourth of the total population compared with one-third in 1914. These figures point to a further reduction in the annual increase in population.

During the last fifty years there has been a large movement of population in Germany from the country and small towns to the large cities. In 1882 when the total population of the country numbered 39,834,000 about 40 per cent was engaged in agricultural pursuits and 60 per cent in industrial, commercial and other occupations. In 1925 with a total population of 62,411,000 only 23 per cent was engaged in agriculture and 77 per cent in other occupations. This increase in the urban population has probably meant an increase in the consumption of such foodstuffs as imported dried and fresh fruit.

Purchasing power

The purchasing power of the German people is of basic importance in evaluating the demand for fruit in that country. German income tax statistics show incomes of wage recipients by classes and these together with supplementary information on incomes other than those of wage earners permit a rough estimate of German purchasing power.

Roughly three-fourths of the German income recipients in 1925 had incomes not exceeding RM 1500 ($357.00) per year. So far as consumers in this group are concerned it seems probable that they can afford to buy only very cheap fruit. A second group of consumers may be formed of the classes receiving from RM 1500 ($357.00) to RM 5000 ($1190) which comprises about 15 per cent of the total German income recipients.

---

a/ Based on a report prepared in the Berlin office of the United States Department of Agriculture.

People in this group are probably good consumers of dried fruit and of the less expensive fresh fruit. In the last group, comprising 11 per cent of the total income recipients, good consumers of fruit also will be found but it must be remembered that this group contains a number of receivers of very large incomes who consume very little dried fruit.

Analysis of German income recipients by groups, 1925

Class		Number	Percentage of total income recipients
		Thousands	Per cent
Income up to and including 1500 RM ($357)	a/	26,519	74
Income above 1500 RM to 3000 RM ($357 to $715)	b/	4,035	11.3
Income above 3000 RM to 5000 RM ($715 to $1190)	b/	1,043	2.9
Income above 5000 RM ($1190)	b/	350	0.9
Miscellaneous	c/	3,907	10.9
Total income recipients		35,854	100.0
Family members without separate income		26,556	
Total German population		62,410	

a/ Includes 17,819,000 employees receiving less than 1500 RM ($357); 6,400,000 recipients of income other than wages whose individual income is less than 1,100 RM ($262), the taxation limit and 2,300,000 recipients of war cripple, widow and orphan supports with incomes mostly below 1,000 RM ($240).

b/ Wage recipients only.

c/ This group comprises income recipients other than employees for which no separation by size of income is possible; it is supposed to include some very large incomes and none below 1,100 RM ($262) the taxation limit.

The following table distributes the family members without separate incomes among the income recipients and gives a rough picture of the purchasing power of the German population for fruit:

Group 1	Able to buy only very cheap fruit	46,171,000	or	74%
" 2	Probably good consumers of fruit	9,437,000	or	15%
" 3	Partly good consumers of fruit	6,802,000	or	11%
	Total German Population (1925)	62,410,000		100%

These calculations are based on population and income statistics for 1925 and it is probable that German purchasing power has increased since that time. Nevertheless, it is believed that these summaries give a fairly good idea as to the ability of German consumers to purchase imported fresh and dried fruit.

Dried fruits in the German diet

Germans, and for that matter northern and western Europeans in general, have not yet learned to eat dried fruits as such. In Silesia dried fruits are used throughout the entire year in making the so-called "Schlesische Himmelreich" which is a famous national dish consisting of boiled rice and dried fruits. A favorite way to prepare prunes is in soups or in mixtures of dried fruits. Used in this form, dried fruit not only serves the purpose of supplying fruit in the diet but it also becomes a complete meal from the quantity point of view. This mixing of foods is partly inherited and is partly the result of thrift and a feeling that the eating of dried fruits as such is too expensive.

Mixed dried fruits in Germany are very popular and most retailers report greater sales in this form than in dried fruits separately, with the possible exception of dried apricots. Boxes may be either faced or unfaced. Prunes used in such mixtures are usually small and prices increase as the percentage of prunes decreases. Mixed dried fruits are usually packed in cellophane containers. The package should not sell over 1.20 Mark or 30 cents. A typical mixture consists of the following:

About	55%	80/90 prunes
"	15%	choice peaches
"	15%	" pears
"	10%	apples
"	5%	choice apricots

Relation of quality in dried fruits to the German market

Germany is a large market for fruit below grade. This is true of prunes, apricots, apples and peaches from America, prunes often unclassified and ungraded from Bulgaria, Rumania and Naples, and of raisins and dried apricots from Russia. The packing plants in Hamburg offer opportunities for the cleaning and reprocessing of such fruit. As the price is of necessity low, large quantities of such fruit can be absorbed, much of which finds its way into jam manufacturing plants. The German trade feels that this demand for off-grade fruit, has created an impression that quality is secondary in the German markets. This is absolutely untrue and to the extent that it prevails it operates to the detriment of sales. Off-grade fruit must never be offered as other than what it actually is. It should be shipped in unmarked boxes or bags only and should never be confused with classified, graded and inspected fruit. One of the most important facts to keep in mind regarding the German dried fruit market is that while it is at present largely a "price market" and one that is willing to buy off-grade fruit to supply the requirements of her poorer class of consumers, the fruit received must be strictly in accord with the samples provided.

Size demands in prunes

Before and shortly after the war, Germany consumed principally small prunes, 70/80's and smaller, but during the last three or four years there has developed a trend toward sizes 40/50's to 60/70's. This tendency has been aided by the relatively cheap prices ruling on larger sizes since the war and in more recent years, 1927 and 1928, by the smaller crops of relatively high priced and somewhat inferior quality prunes from Yugoslavia. Yugoslavia produces only the smaller sizes which, combined with a tendency in California to produce relatively lower percentages of the smaller sizes a/, has made the smaller sizes relatively scarce with a tendency toward higher values compared with the larger fruit. The German trade, however, shows a very positive leaning toward the larger sizes from America and a tendency for these to replace Yugoslav prunes. The trade does not care to accept this tendency as permanent since the Yugoslav prune is well liked and a return on the part of that country to regular supplies of good quality, would find a favorably responding market in Germany.

Prune preferences

Germany presents a natural demand for the more highly flavored, tart variety of prune. The Jewish portion of the population naturally favors the tarter fruit. In the past, this type of prune has been supplied by Yugoslavia and the Pacific Northwest with small supplies now and then from Roumania and Bulgaria. The Pacific Northwest is generally able to supply the larger sizes, thus filling the lack of these in the Yugoslav crop. In 1926 the Pacific Northwest prune secured a very wide distribution in Germany which combined with excellent quality laid the foundation for a large future market. One objection to the Pacific Northwest prune is its irregularity in production. The partial failure of the crop in 1927 and the total failure in 1928 and its consequent absence from trade channels, has given prunes from other sources a stronghold not heretofore held.

The tart prune is particularly well liked in Cologne, but there is a feeling there that the keeping quality of prunes is inferior and that both Yugoslav and Oregon prunes should be a winter article. A high class store in Munich reports a definite demand for the Yugoslav prune, particularly for the pitted prunes of the better grades. These prunes are very black in appearance. The bulk of the business in Yugoslav prunes in that market is done by the cheaper stores where the fruit is sold in bulk. This market is strongly inclined to the Yugoslav prune. Oregon prunes are not so well known. Munich imports small quantities of Bulgarian prunes which are considered equal in quality to those from Oregon. Supplies from that country are limited, however, as Bulgaria ships most of its prunes fresh to Turkey. Yugoslav prunes were formerly sold in large quantities in Berlin but the scarcity of both Bosnian and Oregon prunes has strongly entrenched the California prunes in that market. As the flavor of the tarter prune is preferred by most people, however, it is believed that the interest will swing back when supplies are again available.

---

a/ See "Prune Supply and Price Situation" by Dr. S. W. Shear, University of California.

The natural markets for Yugoslav prunes in Germany are found in the South German States, Bavaria, Wurtemburg, Middle Saxony, Thurigen and Silesia. The German people have so generally eaten Yugoslav prunes in the past that there is a decided preference throughout the country for the acid prune. This is so pronounced that the California prune in one of the largest department stores is used mainly in fruit mixtures with other more acid fruits, including dried apples, peaches, apricots, pears and both Yugoslav and Oregon prunes. In this connection and for this purpose the New York State dried apple is preferred because of its acid flavor. In the face of declining supplies from Yugoslavia, the Pacific Northwest has an opportunity to establish its tart variety as a distinct fruit to supply this consumer preference.

Competition of fresh fruits

A majority of trade factors in Germany consider Spanish and Italian oranges the outstanding competitors of dried fruits and all agree that large quantities of low priced European fruit is at all times a serious competitor and a factor bearing upon demand and prices of dried fruits. It is generally felt that fresh apples and their availability throughout the entire year have definitely decreased the demand for dried apples. On the other hand, many factors competent to judge state that fresh fruits do not offer the competition to dried fruit that is generally believed to exist except when fresh fruits are extremely cheap. Their contention is based on the fact that fresh fruits are generally eaten raw and out of hand while dried fruits are universally cooked and form a part of the lunch or dinner. Unlike the practice in America, fruits in Germany are hardly ever eaten for breakfast. The trade statistics, in the absence of adequate production, data, are the only information at hand to indicate the trend in per capita consumption of fresh fruits in Germany. As far as can be judged from imports, there has been a decided increase in the consumption of fresh fruits in recent years. This is particularly true of oranges, bananas and grapes. Dried fruits, on the other hand, have not maintained pace.

Three important reasons for the increase in fresh fruit consumption, according to a trade factor in Cologne, have been: (1) the enormous quantities of slightly off-grade fruit sold by hawkers and peddlers, (2) the cheapness of the fresh fruit and (3) the effective health agitation.

Competition of canned fruits

Very little statistical information is available on the canned fruit industry in Germany. The trade, however, is of the opinion that an increasing consumption of canned fruits is having some effect on the demand for dried fruit. The fruit canning industry in Germany is still of rather small proportions due largely to the fact that the country does not produce fruits suitable for canning purposes. German canning costs are high, in spite of cheaper labor, due to the lack of modern machinery. Plums and cherries constitute the bulk of the German canned fruit products. The center of the domestic canning industry is at Brunswick. The fresh fruits used have to be shipped long distances, strawberries coming mainly from the Netherlands, apples from southern Germany, and plums from the Rhineland and Yugoslavia. Besides freight costs there is a considerable loss in waste en route.

The imports of canned fruits into Germany, although increasing in recent years, are still small compared with imports of fresh and dried fruits. An important factor in keeping down imports of canned fruit has been the high duty on fruits canned in sugar and imported in hermetically sealed containers. Canned pineapples which constitute the bulk of the canned fruits now imported into Germany, have been an exception because of the lower import duty on fruit imported in juice, i.e., without sugar and in large containers that are not hermetically sealed when passing through the customs. There has been a steadily increasing demand for pineapples in Germany since the War. Peaches, apricots and pears are also imported in juice in order to circumvent the high tariff but the volume of the trade is still relatively small.

The domestic fruit industry in Germany a/

Fruit producing areas in Germany

The southern and southwestern sections of Germany, including the Rhine district, constitute the most important commercial fruit producing areas of the country. Climatic and soil conditions there are favorable for fruit production on an extensive scale, particularly for apples, pears, plums and cherries. The best producing areas are in the valley of the upper and middle Rhine and its tributaries. In some districts peaches and apricots are grown. Marketing conditions are especially favorable to fruit growers in the Rhine valley as Germany's greatest industrial centers are located in the vicinity of the Rhine.

The Lake Constance area is one of the most important producing areas along the Rhine, particularly of apples. The main shipping points are Friedrichshafen, Lindau, Ravensburg and Ueberlingen. The plain of the Rhine Valley between Freiburg and Karlsruhe is another important commercial fruit producing area. Buehl in Baden is well known as a market for early plums and small fruits. Large quantities of cider apples and pears are grown east of the Black Mountains in Wurtemberg. This area also produces a surplus of table apples. The slopes of the Odenwald Mountains north of Heidelberg, constitute another important fruit producing area. The Palatinate on the left bank of the Rhine is especially important for the production of pears, plums and prunes.

---

a/ Based on a report prepared in the Berlin office of the United States Department of Agriculture.

Central Germany constitutes the second most important fruit producing area of the country and considerable quantities of apples, pears, and plums are grown there. As the population is very dense in middle Germany, however, these districts have a deficit and must depend on other areas and on imported fruit. The outstanding feature of central Germany is the large number of plum and prune trees found there. A great share of the prunes and plums harvested there is consumed as fresh fruit and most of the balance is manufacturered into marmalade. The share of prunes dried is relatively insignificant.

Commercial fruit production in northeastern Germany is of relatively little importance except in a few scattered districts. Soil and climatic conditions there are generally unfavorable for apples and pears. Cherries, however, are quite commonly grown in northeastern Germany. In fact the number of cherry trees is greater in proportion to the population in that area than in any other part of the country.

Conditions in northwestern Germany are more favorable for fruit production than in northeastern Germany. Rainfall in northwestern Germany is abundant and the temperatures show smaller variations during the year. Some apple varieties, especially Gravensteins, which need much moisture, show much better quality in northwestern Germany than in the Southern and southwestern districts. In general, however, fruit production has not been developed on an extensive scale in northwestern Germany although it is believed that climatic and soil conditions there would permit of a considerable expansion in the industry, particularly in apple growing.

Changes as a result of the War

No census of the distribution of fruit trees in Germany has been taken since 1913. At that time, however, there was a total of 194,000,000 trees in the country of which 143,000,000 were bearing and 51,000,000 non-bearing. While considerable territory was lost by Germany as a result of the War, Alsace-Lorraine was the only important fruit producing area involved. As a result of these cessions of territories Germany lost 5,803,000 bearing trees and 6,250,000 non-bearing trees. Approximately 5,478,000 of these bearing trees were in Alsace-Lorraine. Deducting the total tree losses from the 1913 census leaves 136,831,000 bearing and 45,000,000 non-bearing trees, or a balance of 182,000,000 trees for Germany with its new boundaries.

FRUITS: Bearing and non-bearing trees in Germany in 1913

Fruit	Bearing	Non-bearing	Total
	Number	Number	Number
Apples	49,744,082	24,631,847	74,375,929
Pears	22,200,657	8,588,229	30,788,886
Plums	52,673,330	11,873,887	64,547,217
Cherries	16,218,848	5,171,240	21,390,088
Apricots	511,679	258,052	769,731
Peaches	1,285,447	735,741	2,021,188
Total	142,634,043	51,258,996	193,893,039

Published in "Vierteljahrshefts zur Statistick des Deutschen Reichs", in 1915.

Post-war developments

Unfortunately there are no official statistics as to the total distribution of fruit trees in Germany at the present time. One authority estimates that in 1920 Germany with its new boundaries had about 15,000,000 more trees than were in existence in the corresponding boundaries in 1913 a/. All commercial authorities seem to be of the opinion that there has been considerable new planting since the War. Official statistics are available showing that as far as the area in which fruit constituted the main land utilization is concerned, the total in 1927 was 210,000 acres as compared with 120,000 acres in 1913. This shows the growing importance of the commercial production of fruit in Germany. Distribution of these commercial areas according to fruits is not available for 1913 but in 1927 mixed fruit constituted 41.8 per cent of the total, apples 31.4 per cent, pears 10.4 per cent, cherries 7.6 per cent, plums 6.1 per cent, and berries (currants, gooseberries and raspberries) 2.7 per cent. The general consensus of opinion in Germany is that apples, mixed fruit, pears and plums made up the main share of the increase.

The increase in the areas devoted to commercial orchards in Germany is believed to be the result mainly of the declining acreage devoted to wine grapes. Even in pre-war times a steady shift from wine-grape production to the production of tree fruits was noticeable. The increasing foreign competition of imported wines in the German market had made the domestic production of wine-grapes unprofitable. The slopes in the valleys of western and southern Germany, therefore, began to be planted with other fruits. This pre-war development has continued since the war. The area devoted to vineyards in Germany during the three years 1911-1913, averaged 199,000 acres annually, according to the International Institute of Agriculture. The 1928 vineyard area was 179,000 acres.

Confusion of varieties has retarded development

Progress in the commercial fruit industry of Germany has been retarded by the confusion of a wide number of varieties. This is particularly true of apples and pears. This confusion of varieties is considered one of the weakest points in the German fresh fruit industry. The wide number of different varieties grown makes it impossible in many cases to deliver a carload of one variety from a producing area. Action was started in 1927 and 1928 to reduce the number of varieties, and to grow only those which have proved to be most practicable. With the encouragement now being given to expert grafting it is believed that the present confusing mixtures of varieties will gradually disappear. The Chambers of Agriculture have compiled lists of recommended varieties which promise success in local districts. Considerable extension work is being done in this connection by the Chambers of Agriculture which receive support from the State and in some cases from the Federal Government. There are 35 Chambers of Agriculture in Germany.

---

a/ Estimate of A. Janson published in "Der Grossobstbau", Berlin, 1924.

Official assistance to fresh fruit industry

A part of the 30 million marks appropriated in 1928 by the Federal Government for farm relief purposes has been set aside to promote the fresh fruit industry. According to the provisions of the "Farm Relief Program" this money must be used as follows:

1. To improve the marketing of domestic fruit by the encouragement of cooperative marketing and by the establishment of collecting, sorting and packing plants;

2. To make specific studies of marketing problems;

3. To improve the quality of the fruit by reducing the number of varieties, by teaching improved methods of insect and disease control and by setting up commercial grades and standards.

German fresh fruit import trade

Trend in German fresh fruit imports

Fresh fruit consumption in Germany in recent years has been stimulated as a result of improved transportation facilities and local handling methods and also by the encouragement given to fruit consumption by the medical profession. There has been a steady upward trend in the per capita net imports of fresh fruit since the war. Net imports during the five years 1924-1928 averaged 23 pounds per capita as compared with 20 pounds per capita during the five years 1909-1913. Increased imports of oranges and bananas largely account for this tendency. While no statistics are available on the domestic production of fruits in Germany increasing attention is being devoted to commercial fruit culture. Progress along these lines may be expected to have considerable bearing not only on the import trade in fresh fruits but also on the future demand for dried fruits in Germany.

Total imports of fresh fruit into Germany during the five years 1909-1913 averaged 659,000 short tons annually. Exports and reexports during the same period averaged only about 21,000 short tons annually. Since the War imports of fresh fruit have been increasing steadily but the export movement has declined, the former averaging 743,000 tons annually during the five years 1924-1928 and the latter 12,000 tons.

Oranges, apples, bananas, grapes, lemons and pears constitute over 90 per cent of the fresh fruit imported into Germany. Spain and Italy supply most of the oranges; the United States, Switzerland, Austria, Italy and Holland most of the apples; the British West Indies, Honduras, Columbia and the Canary Islands most of the bananas; Italy, France and Spain most of the grapes; Italy and Spain most of the lemons, and Czechoslovakia, Belgium and Italy most of the pears. During the five years 1909-1913 apples constituted 42.5 per cent of the fresh fruit imports and oranges 21.8 per cent. Apple imports have been smaller since the war but oranges have increased in importance. During the past five years 1924-1928 apples constituted only 29.6 per cent of the total and oranges 30.4 per cent.

Market periods of principal fresh fruits a/

Fresh fruits are available to the German market throughout the entire year and particularly during the fall and winter when the United States is shipping its new crop of dried fruits. Hungarian and Yugoslav apples and American Gravensteins are available on the German market during August and September. The domestic apple crop is available from October to December and runs much later in good crop years. The bulk of the European apple crop arrives during October and November and some in December. If crops in France, Holland and Belgium are good imports may run into January and February. American apples are available on the German market in largest volume from January to March. Australian apples appear during April and last through June. Cherries come on the market in June and plums start in August and continue to October. About 95 per cent of all oranges, mostly Spanish and Italian, are imported from December to May. Banana shipments arrive throughout the year but are heaviest in the spring and summer months. Increased quantities of fresh prunes are being imported from Yugoslavia, Bulgaria, Hungary and Rumania during the late summer and early fall.

a/ According to the report from Mr. O. L. Dawson, Assistant Agricultural Commissioner at Berlin.

FRESH FRUIT: Imports and exports from Germany, averages 1909-1913 and 1924-1928

Kind of fruit	Average 1909-1913 Imports	Average 1909-1913 Exports	Average 1924-1928 Imports	Average 1924-1928 Exports
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Fresh fruit				
Table grapes.......	76,446	218	116,830	188
Apples.............	560,275	5,193	440,369	2,019
Pears..............	100,698	5,012	107,460	4,755
Peaches............ a/	10,463	b/	22,788	b/
Damson plums.......	47,340	17,240	22,334	7,723
Other plums c/.....	13,215	d/ 2,104	18,919	d/ 2,094
Cherries...........	17,759	2,723	14,025	3,844
Strawberries.......	12,595	179	9,158	24
Other berries......	38,109	5,136	28,803	1,459
Bananas............	66,721	1,194	125,675	534
Oranges............	288,112	1,952 (oranges and lemons)	452,081	1,666 (oranges and lemons)
Lemons............. e/	80,745		115,658	
Pineapples.........	5,289	97	11,377	16
Total.........	1,317,767	41,048	1,485,497	24,322

Compiled in the Foreign Section, Division of Statistical and Historical Research, from "Auswartigen Handel" for years mentioned.

a/ Includes apricots for 1909-1911. Thereafter apricots are included in "other plums".

b/ Included in "other plums".

c/ Listed as Mirabell, Green Gage and other fruits of the plum family.

d/ Includes exports of peaches.

e/ Includes relatively insignificant quantities of other citrus fruits and of fresh dates and figs.

Trade practices and marketing developments

Principal ports of entry

For many years Hamburg has been the outstanding dried fruit distributing center for Northern and Western Europe. Excellent dock and free harbor facilities, financial resources, experience in fruit trading, together with the fact that it is the geographical center for a large consuming territory, have combined to give Hamburg this supremacy. Northern and Eastern Germany, Central Europe, Poland and the Scandinavian countries were all served through this port in pre-war days. Following the war this supremacy for a time was threatened. The isolation of Hamburg during the war forced the Scandinavian countries to buy increasing quantities of their fruits direct from producing areas and this trend has been manifested in a number of Central European countries which formerly purchased through Hamburg. The threatened decline in the position of Hamburg as a fruit importing port has been overcome in recent years by the increased volume of dried prunes handled by that port. Hamburg is still the leading dried fruit importing market in Germany for every variety of fruit except prunes from Yugoslavia. Bremen is next in importance. The Rhine cities are important markets for fruit coming into the country via the Netherlands and Belgium. Passau and Regensburg on the Danube river are the leading ports for the importation, packing and distribution of Yugoslav prunes.

Time required to serve Germany from export countries

German ports secure excellent freight service. The available refrigerator space is constantly increasing and has been an aid in securing fresh fruits in excellent condition. Distance is no longer a formidable handicap from a quality standpoint, the time required for fruits to arrive in Germany from different ports and countries is as follows:

New York	to Germany	10-14 days
Pacific Coast	" "	4-6 weeks
Australia and New Zealand	" "	6-8 weeks
Capetown (South Africa)	" "	3-4 weeks
Mediterranean Countries	" "	2-3 weeks
Yugoslavia (prunes)	" "	10-14 days

Buying periods for dried fruits

The bulk of the dried fruit business in Germany is done for arrival in October and November so as to have the goods on hand for the Christmas trade. New crop contracts are partly entered into from three to four months before shipping date. It is common for the large factors in wholesale distribution to buy about fifty per cent of their prune needs in the fall and then in smaller lots as needed. There is more buying throughout the year in Germany than in most of the other European countries. This tendency will no doubt continue as the consumption of prunes extends into the summer season. If prices are considered right, comparatively large quantities may be purchased in advance, but the practice of speculation in dried fruit on paper is generally unknown in Germany. Inquiries for prunes especially late in the season, fairly well reflect the inland demand.

Distributing agencies

The distribution of dried fruit in Germany is still largely in the hands of the long established importers located principally at Hamburg and in a much smaller degree at Bremen and the Rhine ports. Hamburg possesses all of the facilities for handling fresh and dried fruit on a large scale. Most of the dried fruit importers in Hamburg have their own packing facilities or have their prunes packed by others. Distances to inland markets are relatively short and this with the availability of rapid means of transportation and communication makes it possible to distribute supplies quickly in all parts of Germany. The Hamburg importers and packers sell to wholesalers in the inland cities and the latter sell to retailers.

Consumer cooperative and group buying has made rapid progress in recent years, but there is no decided tendency as yet for such organizations to buy their fruit supplies direct from exporting countries. They still continue to rely upon Hamburg and Bremen importers. There is a definite inclination on the part of inland cities, however, for direct representation. This may result in a tendency to ignore Hamburg and Bremen importers. The latter development is particularly true of certain Mediterranean dried fruits. While a few of the larger American prune exporters have established direct connections in some of these inland markets, it seems unlikely that such direct representation will result in a large volume of sales owing to the advantages offered by the prune packing industry at Hamburg. Such direct trade at the present time is confined to relatively small quantities of the very large size prunes and to dried fruit other than prunes which are bought in original pack and come direct into the Rhine country via Holland. Hamburg importers maintain that a development of this kind would not result in a greater volume of sales and that shippers' risks are greatly increased thereby due to the relatively weak financial position of the inland trade.

Hamburg has both the agent and local broker. Theoretically, the agent represents the shipper and the local broker handles sales among importers. He may be employed by the agent on a split brokerage basis. It is common to give him offers "subject to confirmation", the agent handling all "firm" offers. It is generally understood that the local broker has no direct account but this rule is often disregarded since Hamburg at present is not nearly as speculative as it was three or four years ago. It is generally well understood that the agent cannot be a regular buyer of fruit. In the fall when payments are heavy, it is occasionally the practice for agents to finance buyers. In that case the buyer is willing to add enough to the sales price to reimburse agents for interest during the time elapsing between arrival of documents and arrival of goods. This, however, is a rare practice.

Trade organizations

The "Reichsverband des Deutschen Nahrungsmittel Grosshandels" with headquarters at Berlin is the national association of wholesalers for Germany. It takes an active part in such dried fruit questions as tariff rates, contracts and restrictive measures regarding imported fruits and health. The "Verein zur Foerderung des Hamburgischen Handels mit Kolonialwaren und Getrockneten Fruechten" is a local Hamburg organization and is the clearing house for difficulties of a local trade nature. Similar

associations are located at other ports. Germany is taking an active part in the International Wholesaler Association which was created in 1927.

Group buying

Cologne is the center for the "GEPAG", a large central buying organization for various Catholic consumers cooperative buying societies. Its turnover in 1928 amounted to 20 million dollars. All kinds of foodstuffs are handled and they pack prunes in their own plant. The "EDEKAZENTRALE" with headquarters in Hamburg buys all foreign imports for various central associations located in the larger cities comprising about 38,000 retail stores. In 1928 their prune business totaled 90,000 boxes of 25 pounds each. The "Grosse Einkanfs Geselschaft, Deutsche Konsumevereine", is another consumers buying organization. This cooperative organization usually referred to as the G.E.G. comprised 1,033 consumer cooperatives in 1928. Its total turnover in 1928 was 1,124 million Reichsmark ($281,000,000) as against 247 million Reichmark ($61,700,000) in 1927. Goods produced in their own factories totaled $26,000,000 in 1928 as against $15,700,000 in 1927. Some units of G.E.G., as the one at Dusseldorf, are allowed to buy direct but most of the buying is done through the Hamburg office.

Another Hamburg cooperative buying society is the "Production" which is made up mostly of workmen. Their buying is done through the G.E.G. In 1928 this group had a membership of 101,909. Its activities include savings banks, building societies, bakeries, furniture factories, meat shops and almost the entire range of articles concerned with the home and living. Its turnover in 1927 amounted to $16,000,000. Chain stores have not made the progress characteristic of them in the United States but they promise to become an increasing factor in time.

Origin marks on boxes

The practice adopted in 1927, of stamping "Grown and Packed in California" on every box of original pack California dried fruits does not appear to be strictly enforced. This stamp should not be omitted and attention should be drawn to it especially if an advertising program is adopted. The German trade does not consider Santa Clara as a geographical designation but as a standard for quality. For that reason it is their contention that the better grade be marked "Santa Clara" prunes although admitting that the full premium is not always secured. The attitude of considering "Santa Clara" prunes as a designation of highest quality rather than as a term designating a geographical district is common all over Europe. Prunes in boxes destined for Germany should be strapped separately, each box with one wire in the center, rather than two boxes to a bundle. The 12½ kilo (27½ pound) box is the most common in use both for local and original pack.

Payments and inspection

Dried fruit contracts provide for buyer's option, three days sight draft on German buyer, or sixty days American banker's acceptance credit. The seller pays the interest and prices for both terms are the same. Very little use is made at present of a banker's credit, the three days sight draft being used almost exclusively, the objection to banker's credit being that it offers no inducement. In some quarters it is urged that the greater safety possible under the credit plan should be compensated for by a rebate on the c.i.f. price, which would result in larger purchases. This, however, is a violation of the contract terms.

While the German trade admits that the practice of contracting for Pacific Coast dried fruits on the basis of Dried Fruit Association certificates being final as to quality, is both desirable and practicable, they insist that no allowances be made as to quality. This is particularly true of dried fruits requiring special preparation such as apricots, raisins, peaches, pears, and apples, on which most complaints have been made. Apple rings, particularly, have caused difficulties but the trade in this respect is blaming the individual shipper as much as inspection. American prunes have a high reputation for good quality.

No special contract forms are used in buying dried fruits from other competing nations. Imports other than those from the United States are subject to arbitration at destination. Credit terms vary but they generally include payment on arrival of goods, shipping documents to be surrendered against payments only. Russian dried fruits are consigned and sold through Government representatives after arrival. The stronger houses in Germany have no objection to the severe contract terms on fruits from America as it has a tendency to eliminate the smaller and less desirable operator. Ports in competition with Hamburg find objection to the extremely favorable terms extended by that port.

Retail and wholesale buying

Retailers generally buy in small quantities, covering their immediate needs only. This practice is very pronounced in Germany as fresh pack is quickly available from packing centers. Weekly buying by large retailers is common. Losses due to spoilage under this policy are reduced to a minimum. Under the Hamburg plan of "open" assortments, the sizes in demand by consumers can always be secured.

Bargain sales of dried fruits combined with advertising to move large quantities or to serve as "leaders" hardly ever occur in the average retail grocery store in Germany. This practice is well understood, however, by the newer type of department stores which have found it a means to greatly increase their sales.

Inland wholesalers will contract for large quantities only when they consider the market favorable. Such contracts are not for prompt delivery, but often run over three or four months, to be called for in small lots during that period. While quantity and prices are definitely stated, the matter of size is left open and can be altered from time to time depending upon consumer preference. Wholesalers, therefore, are not confronted with the problem of having to dispose of sizes not particularly in demand. The credit terms are extremely liberal, starting with thirty days and extended if necessary to sixty and even ninety days. Under this plan, Hamburg practically finances the prunes until consumed. This type of contract is a unique feature of the German trade and is only possible because of the terms extended by the packing centers.

Retail selling of dried fruit

The retail stores catering to the wealthy classes are unimportant in general as dried fruit outlets. Their customers prefer canned and fresh fruits. This tendency has become more pronounced as economic conditions have improved. Fresh fruits are offered for sale in these stores throughout the year. While the patrons of these stores generally do not indicate much of a demand for dried fruits, prunes are an exception as they are looked upon as healthful. Only the largest size and highest quality of prunes are demanded. The packages should be neat and the prunes shiny. The usual unit of sale in these particular stores is high, ranging from two to five pounds. Even in the retail stores catering to the wealthier classes, dried fruits in cartons are not popular. Special packs in glass containers from France are in demand by a limited number of consumers. It has been suggested that dried fruit in cartons might be made more popular if shippers would provide shelf display cartons with cellophane front so that the fruit could be seen. Prunes in these stores are identified by countries but no distinction is made between California and Pacific Northwest prunes.

In the small and medium size retail stores catering to the families with medium income, mixed dried fruits and ring apples, where there is a bakery trade, are most popular. The patrons of these stores judge quality first by taste and then by appearance. In prunes the demand is decidedly for tart fruit. The fruit must be black in appearance. Dried fruits are called for from Christmas and continue until new fresh fruit is available, beginning usually with strawberries. Prunes in cartons are not wanted. The tendency is to distinguish between prunes coming from California and Yugoslavia but no distinction is given the Pacific Northwest prunes although the taste of the latter may be preferred. The unit of purchase in these stores is about two pounds.

In large establishments catering to a wide range of consumers, the unit of purchase is a pound or less. There is a continual demand in these stores for dried fruits used as ingredients in soups and other dishes. The demand for prunes alone is confined mainly to the winter months. Black and shiny prunes are preferred. The appearance of the fruit, moisture content and taste are the points most often referred to in these stores.

Carton prunes in these stores are out of the question since fruit must be available for inspection by the prospective purchaser. Raisins in cartons are making very slow progress even under advertising. In the mountain resort regions, however, the cellophane mixed fruit package is making some progress.

The price tag on dried fruits is the accepted rule in all types of retail stores but it is particularly important in stores which cater to the medium and less-well-to-do families. In these stores dried fruits are always displayed in neatly arranged heaps or in open boxes so that everybody can see the quality and mixture of the fruit. The German housewife lays the utmost importance on seeing what she buys. Identity of the fruit is not entirely lost as mixed fruit may be designated as "Californische Backobst." Individual dried fruits are designated as Californian prunes, Turkey raisins or Bosnian prunes. Often the display boxes have no identifying marks whatsoever and cards may indicate "These are California Prunes", "These are Californias, unbleached sultanas", or "These are Bosnian prunes". In Germany the distinction is mainly between sweet and tart varieties. The term "Catherinen Pflauman" is frequently used to designate a sweet prune. The practice of buying by sight has developed elaborate and often effective displays which are powerful factors in making sales. American dried fruit interests can well afford to give every encouragement to such displays.

Designating prunes as large, medium and small

Original sale of prunes on the basis of large, medium and small is held by the German trade as quite impossible. In their opinion this size range is too wide and the basis too indefinite. Aside from the fact that the established gradings have been in operation since the beginning of the industry and are generally followed by all prune exporting countries, it is held that the present system more nearly expresses real values than the less definite plan.

While the present size gradings are carried down to the retailer, they mean very little to the consumer. Prunes are not displayed and sold as 30/40's or 80/90's, such terminology being foreign to the consumers. Some stores have only two grades, large and small, while others have a general range of large, medium and small. In stores catering to the less-well-to-do classes even these designations are obscured by the question of price. Under the present system the retailer has an opportunity of doing his own mixing and price variation between stores can be explained on the ground of "better quality". Herein lies one of the inherent objections to the carton package which definitely establishes the quality and grade of fruit.

Packing prunes in Germany

In 1928 there were in Hamburg eleven importers of prunes who owned their own packing plants. In addition there were four operators, doing custom packing for others. Bremen has one packing plant catering to custom packing for importers. Two or three packing plants are located on or

near the Austrian border. There are two packing plants in interior Germany. "Gepag" at Cologne does its own packing. For the present this is adequate packing facility.

The rapid growth of packing facilities in Germany was due largely to the 10 Mark per 100 kilos ($1.08 per 100 pounds) differential in favor of bag prunes which ruled prior to 1927. With this differential now reduced to 2 Marks per 100 kilos (21 cents per 100 pounds) the incentive to engage in packing has been largely removed. Packers now established, however, appear content with the present low differential and there is no agitation for increasing the amount. Undoubtedly the packers were fearful of results under continued increasing competition among themselves. The expected increase in imports of original pack prunes under the lower differential (less than 1/4 cent per lb.) has not materialized as yet. While there has been some increase it has been confined mainly to Bosnian prunes coming in through the ports of South Germany.

Processing method

Some of the smaller firms in Hamburg still adhere to the "dipping" method of processing prunes which involves much hand labor. Four or five of the larger and more responsible operators, however, have installed labor saving machinery and modern processing equipment. Machines for marking boxes, automatic weighers and mailing machines are common in such plants. Gas is used for heating and is applied directly to the water in the processor. The latest processing machine installed provides for a hot air draft as the prunes roll into the chute for boxing. These plants are clean, well managed, and give the appearance of operating for volume output. The box shook used is usually of Pacific Coast or German origin. The marks printed on them usually consist of the brands, size marks and invariably the words "Santa Clara Prunes". Yugoslav prunes are designated as such and are recognized by box dimensions. Wages for women are 4 marks ($1.00) per day and men 8 marks ($2.00) for 8 hours work. Women are employed mostly for this work.

Hamburg prune packers have been accused of mixing varieties, adding too much moisture, packing off-counts, blowing up sizes, packing under weight, calling the packed fruit Santa Clara prunes when they were not bought as such, and blending too far apart. Where there are no official regulations such as on the Pacific Coast, requiring packing to certain definite standards, and where one's own conscience is the only guide, it is possible that at one time or another all of these practices have been indulged in. It is admitted that some of the less responsible firms might at present be lax as to quality but the larger and more progressive operators realize that competition both in local and original pack requires a high degree of standard in quality. In order to protect their reputation, custom packers in Hamburg have found it necessary to refuse to mix varieties or to add an unusual percentage of moisture when asked to do so. This is acknowledging the fact that prunes from Yugoslavia, the Pacific Northwest and California, have over many years developed distinct methods of processing prunes each suitable to the characteristics of the fruit from these areas.

Oregon had complaints regarding her pack as long as attempts were made to secure packing gains equal to California. The tender-skinned, acid-flavored and artificially-dried Oregon prune requires different treatment from that of the sun-dried California prune. It is only in comparatively recent years that the Pacific Northwest prune has been able to build up a reputation for keeping quality, possible only at the cost of material improvement in packing. Yugoslav prunes, as at present dried, are more suitable for "etuvage" which is in reality a second drying, than for "dipping" or the addition of water.

Custom packers further refuse blends that are too far apart but will take half of one size and half of another. Occasionally, packers will have an agreement with retailers so that prices will be based on a count other than those recognized in the original pack. It is generally admitted that local pack contains more water than original pack but this is not looked upon as a questionable practice. It is maintained that more water results in a blacker, more pliable and more appetizing fruit. Furthermore, it is held that more water is possible as the local pack need not be shipped by water under tropical conditions. As wholesalers can order forward in small lots and retailers buy from hand to mouth, the turnover is frequent and keeping quality is less necessary than with the original pack. Designating prunes as "Santa Claras" is claimed to be ethical as the German people, and for that matter all European people, as previously mentioned, do not think of Santa Clara as a geographical area but as a designation of highest quality.

Advantages of Hamburg pack over original pack

The attitude of the trade throughout Germany toward the Hamburg pack is frequently expressed by a feeling of uncertainty as to just what has happened to the prunes while passing through the Hamburg packing plants. There is an almost unanimous agreement that Hamburg pack carries more moisture than original pack, although the better operators are improving in this respect. Other advantages, however, outweigh the matter of quality. Among these various advantages, as expressed by the wholesalers, are the following: (1) They are cheaper; (2) always fresh; (3) can be ordered as needed; (4) easy credit; (5) availability of sizes demanded by consumers; (6) quick deliveries; (7) requires less storage space; (8) difficulties can be easily adjusted through personal contact.

One of the largest department stores in Germany admits that some preference is given original pack chiefly because they feel that no undue amount of moisture has been added and that there has been no mixing of sizes. However, if prices on Hamburg pack are cheaper the preference goes there and as they buy weekly their turnover is rapid and the freshly packed prune is an important factor in selling. The "Edekazentrale", in Hamburg, one of the largest cooperative buying units, buys about 90 per cent Hamburg pack and 10 per cent original pack. A quantity of original California pack is bought for Christmas and later only on orders. The bulk of the purchases consist of Hamburg pack and in the spring the Hamburg pack is bought exclusively. The quality of the original pack is held superior and the trade will pay a small premium for it. Attempts

to provide some restriction on Hamburg pack may materialize in the near future. Four or five of the more responsible packers have agreed to form a commission which has for its purpose the bringing of the Hamburg pack to a standard of higher quality.

Charges lower on Hamburg pack

The ocean freight and tariff charges are considerably lower on prunes imported into Germany in bags than on boxed prunes. This gives the German importer of bagged prunes a material advantage over the importer of "original pack prunes". The total handling charges from the Pacific Coast to Hamburg are $1.40 per 100 pounds on prunes in bags and $1.78 per 100 pounds on prunes in boxes. This advantage of 38 cents per 100 pounds in buying bulk prunes is reduced, however, not only by the loss in weight of bag prunes, estimated by some at one per cent, but also by subsequent extra cartage and handling charges.

Comparisons of charges on original pack and Hamburg pack

Items	Prunes in boxes per 100 lbs net	Prunes in bags per 100 lbs
	Cents	Cents
Freight: Pacific Coast to Hamburg	84.5	75.0
Tariff per 100 kilos gross, 8 marks less 10 per cent tare	87.5	-
Tariff per 100 kilos, 6 marks	-	65.0
Strapping charges	5.5	-
Total per 100 pounds net	$ 1.775	$ 1.400

Packing rates

Hamburg rates for custom packing are 68 cents per 100 pounds (6.3 marks per 100 kilos) when packed in boxes containing $12\frac{1}{2}$ kilos of fruit. When packed in boxes containing 25 kilos of fruit the rate is 56.5 cents per 100 pounds (5.2 marks per 100 kilos). The custom packing rates on the Pacific Coast vary considerably. In Oregon, where gain in weight and blending must be small in order to obtain a finished pack of good keeping quality, the packing rate is $1.50 per 100 pounds. In California the rate is $1.00 per 100 pounds. This shows that the packing cost in Hamburg varies from 56.5 cents to 68 cents per 100 pounds, depending on the size of the container, while on the Pacific coast it ranges from $1.00 to $1.50 per 100 pounds. The advantage to the Hamburg packer, however, is not as great as these figures would seem to indicate since the handling costs on

the Pacific coast in receiving and grading prunes that are to be shipped to Hamburg in bags amount to about 25 cents per 100 pounds and are included in the price paid by the Hamburg importer.

The following table, compiled from trade sources, gives the movement of packed and unpacked prunes through Germany by calendar years from 1926 to 1928.

DRIED PRUNES: Movement in bags and boxes through German customs, 1926-1928

Movement	1926	1927	1928
	Pounds	Pounds	Pounds
Imported in bags and reexported in boxes	9,688,000	9,636,000	23,925,000
Imported in bags and packed for the trade in Germany	44,418,000	50,182,000	61,888,000
Imported "original pack" in boxes	2,024,000	2,083,000	9,138,000
For "ships transit"	55,000	154,000	116,000
Total	56,185,000	62,055,000	95,067,000

------------ 0 ------------